

This listing of claims will replace all prior versions, and listings of claims in the application.

**Listing of Claims:**

Claim 1 (canceled)

2. (currently amended) An isolated DNA molecule having a nucleotide sequence ~~as~~ in of SEQ ID NO: 12, wherein adenine is in nucleotide position 307 of the open reading frame instead of guanine.

Claim 3 (canceled)

4. (previously presented) An isolated DNA molecule which is complementary to the nucleotide sequence of claim 2 or SEQ ID NO: 12.

Claim 5 (canceled)

6. (previously presented) An isolated DNA molecule according to claim 2 with a thymine in nucleotide position 229.

7. (previously presented) A fragment of the isolated DNA molecule of claim 2, said fragment including a nucleotide sequence that distinguishes *E. coli* F18 colonization resistant swine from sensitive swine.

8. (currently amended) A nucleic acid probe, whose sequence ~~is derived from~~ is complementary to SEQ ID NO: 12 or a fragment thereof, the probe capable of detecting if the nucleotide at position 307 of the open reading frame of the alpha (1,2) fucosyltransferase gene 1 in swine is guanine.

9. (currently amended) A nucleic acid probe whose sequence ~~is derived from~~ is complementary to SEQ ID NO: 12 or a fragment thereof, the probe capable of detecting if the nucleotide at position 307 of the open reading frame of the alpha (1,2) fucosyltransferase gene 1 in swine is adenine.

10. (canceled)

11. (currently amended) Nucleic acid fragments of swine FUT1 produced by amplification of the FUT1 followed by restriction with restriction enzymes CfoI (A) and ACiI (B), wherein the amplified FUT1 fragments are restricted.